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## NOTICE OF ALLOWANCE AND FEE(S) DUE

27045 7590 12/29/2009

ERICSSON INC.  
6300 LEGACY DRIVE  
M/S EVR 1-C-11  
PLANO, TX 75024

EXAMINER

JAMA, ISAAK R

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 12/29/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/596,779

06/23/2006

Halbe Hageman

P19059-US1

1384

TITLE OF INVENTION: MANIFOLD IN A RADIO BASE STATION AND METHOD OF USING SUCH A RADIO BASE STATION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/29/2010

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

# **PART B - FEE(S) TRANSMITTAL**

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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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27045 7590 12/29/2009

ERICSSON INC.  
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PLANO, TX 75024

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(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/596,779 06/23/2006 Halbe Hageman P19059-US1 1384

TITLE OF INVENTION: MANIFOLD IN A RADIO BASE STATION AND METHOD OF USING SUCH A RADIO BASE STATION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional NO \$1510 \$300 \$0 \$1810 03/29/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
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JAMA, ISAAK R 2617 455-561000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

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Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,779	06/23/2006	Halbe Hageman	P19059-US1	1384
27045	7590	12/29/2009	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024			JAMA, ISAAK R	
			ART UNIT	PAPER NUMBER
			2617	
DATE MAILED: 12/29/2009				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 474 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 474 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/596,779	HAGEMAN, HALBE	
	<b>Examiner</b>	<b>Art Unit</b>	
	ISAAC R. JAMA	2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Communications with Applicant's counsel on 12/16/2009.
2. ☒ The allowed claim(s) is/are 1-10; 12-16 and 19-25, now renumbered 1-22.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date ____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date ____.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other ____.</li> </ol> |
|--|---|

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Sidney Weatherford on 12/17/2009.

#### Listing of Claims

1. (Currently amended) A radio base station comprising:

a monitor ~~and~~, including a sequencer, an executor and a generator;

a memory and;

one or more resources, said memory being connected to the monitor and arranged for storing tasks and data, each of said resources being connected to the monitor and arranged for at least one of performing an arithmetic function and executing a program, and

at least one analog signal manifold comprising:

input lines, output lines, and nodes for making connections between input and output lines, said input lines and output lines being connectable to predetermined resources and said nodes being arranged to perform a mathematical operation on an incoming signal on the input lines.

2. (Previously Presented) The radio base station according to claim 1, wherein said resources that are arranged to execute a program are also arranged to generate trigger signals and send them to the monitor, said monitor being arranged to receive said trigger signals, to read one or more tasks related to said trigger signals from said memory, to check whether resources required for performing said task are available and to send commands to selected resources specifying the task to be performed.

3. (Previously Presented) The radio base station according to claim 1, wherein connections between said memory and said monitor, and connections between said resources and said monitor are implemented by means of a bus.

4. (Previously Presented) The radio base station according to claim 3, wherein said resources are arranged for mutual communication via said bus.

5. (Previously Presented) The radio base station according to claim 3, wherein using the bus is based on a datagram principle.

6. (Previously Presented) The radio base station according to claim 1, wherein said memory comprises a task memory and a data memory.

7. (Previously Presented) The radio base station according to claim 1, wherein said monitor comprises a state machine sequencer for handling several state machines in parallel.

8. (Previously Presented) The radio base station according to claim 7, wherein said memory comprises a ROM portion and a RAM portion, said ROM portion storing

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state machine definitions for said state machine sequencer, task definitions and default structures, said RAM portion storing dynamic data.

9. (Previously Presented) The radio base station according to claim 8, wherein said RAM portion stores a resource allocation table, a data block list, and data blocks.

10. (Previously Presented) The radio base station according to claim 1,

wherein said monitor comprises an executor arranged for:

sending commands to resources;

sending task block requests to memory;.

receiving status information from resources; ~~and~~

receiving task blocks from memory; and

maintaining said resource allocation table.

11. (Cancelled)

12. (Previously Presented) The radio base station according to claim 1,

wherein said one or more resources comprises at least one of:

a transmitter,

a receiver,

a digital analog converter,

an analog digital converter,

a control unit, and

a digital signal processor.

13. (Previously Presented) The radio base station according to claim 12, wherein said one or more resources comprise at least one digital signal processor storing an executable image for performing a program.

14. (Previously Presented) The radio base station according to claim 12, wherein said one or more resources comprise  
a plurality of transmitters,  
a plurality of receivers,  
a plurality of digital analog converters, and  
a plurality of analog digital converters, said at least one analog signal manifold being arranged for making connections between said plurality of transmitters and said plurality of digital analog converters, and for making connections between said plurality of receivers and said plurality of analog digital converters.

15. (Previously Presented) The radio base station according to claim 1, wherein said mathematic operations comprise at least one of multiplying, adding, subtracting, and one-to-one connecting.

16. (Previously Presented) A method of operating a radio base station having a monitor, memory, one or more resources and at least one analog signal manifold, said memory being connected to the monitor and storing tasks and data, each of said one or more resources being connected to the monitor, said at least one analog signal manifold comprising input lines, output lines, and nodes for making connections



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between input and output lines, said input lines and output lines being connected to predetermined resources, said method comprising:

performing one of an arithmetic function and executing a program by said one or more resources,

reading one or more tasks from said memory, checking whether resources required for performing said one or more tasks are available and sending commands to selected resources specifying the task to be performed;

connecting one or more input lines with one or more output lines of the analog signal manifold by means of said nodes; and

performing at least a mathematical operation on an incoming signal on the input lines in said nodes.

17. - 18. (Canceled)

19. (Previously Presented) The method of claim 16, wherein connections between said memory and said monitor and connections between said resources and said monitor are implemented by means of a bus and said resources are arranged for mutual communication via said bus.

20. (Previously Presented) The method of claim 16, wherein said monitor comprises a state machine sequencer for handling several state machines in parallel.

21. (Previously Presented) The method of claim 16, further comprising storing a resource allocation table, a data block list and data blocks in a RAM portion of said memory, which comprises a ROM portion and the RAM portion, said

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ROM portion storing state machine definitions for said state machine sequencer, task definitions and default structures, said RAM portion storing dynamic data.

22. (Previously Presented) The method of claim 16, further comprising: sending commands to resources; sending task block requests to memory;. receiving status information from resources; and

receiving task blocks from memory.

23. (Previously Presented) The method of claim 16, the analog signal manifold being arranged for

making connections between said plurality of transmitters and said plurality of digital analog converters, and

making connections between said plurality of receivers and said plurality of analog digital converters.

24. (Previously Presented) The method of claim 16, wherein the step of performing a mathematical operation includes at least one of multiplying, adding, subtracting, and one-to-one connecting.

25. (New) The radio base station according to claim 1,  
wherein said monitor comprises a generator arranged for:  
generating signals with intermediate frequencies.

***Allowable Subject Matter***

The following is an examiner's statement of reasons for allowance: The prior art made of record and relied upon by the Examiner in the prosecution of this Application fails to teach or even suggest "A radio base station comprising: a monitor, including a sequencer, an executor and a generator; a memory; one or more resources, said memory being connected to the monitor and arranged for storing tasks and data, each of said resources being connected to the monitor and arranged for at least one of performing an arithmetic function and executing a program, and at least one analog signal manifold comprising: input lines, output lines, and nodes for making connections between input and output lines, said input lines and output lines being connectable to predetermined resources and said nodes being arranged to perform a mathematical operation on an incoming signal on the input lines.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ISAAK R. JAMA whose telephone number is (571)270-5887. The examiner can normally be reached on Monday-Thursday; 4-10.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/IRJ/

/LESTER KINCAID/

Supervisory Patent Examiner, Art Unit 2617